Supplement 1

CM Karen Hiller 01252021

Compare annual pothole counts from 2010-2020 – I realize their might need to be weather tags on each year….but a fundamental of our street program was that by fixing our streets we would reduce the time and expense needed for emergencies and repairs, such as potholes. If not yet, when would be expect that to turn?

See below

Status of preventive maintenance programs – Back in 2010, all preventive maintenance routines had fallen apart except, maybe, traffic signal replacement. It would be interesting to see where, along the 2010-2020 line, each was reinstated, where it is now, and, if not at optimal, what optimal looks like and when we think we will get there. Crack-sealing, microsealing, mill and overlays, lane and crosswalk-striping, alley grading, street-sweeping, tree trimming, stormwater inlet cleanouts, others.

Per Brian Faust and Jaci Vogel:

As far as preventative maintenance, Operations has been crack sealing when and where they can for many years. Starting in 2018, there was actually a budgeted item for preventative maintenance (crack sealing and surface (micro) seal) in the CIP. On a large scale, it’s only been since 2018. The proposed CIP lists this item each year. Where we have done preventative maintenance, their calls have dropped significantly.

- There are a lot of streets and a tremendous backlog of deterioration to overcome.
- Where projects and preventative maintenance has been conducted, Street has reduced or had minimal actions (such as where you have micro-surfaced little to no pothole filling or crack sealing needed).
- Pothole counts are very weather dependent – the more freeze-thaw cycles, the greater number of potholes. Last winter we began using a better cold pothole patch material from Schilling and we are seeing the filled holes still filled a year later!
- Last summer we began using a roller whenever possible after regrading aggregate alleys, and we are seeing them not needing to regraded as frequently. This has reduced the backlog and reworking of alleys (again weather dependent and the number of garbage trucks traveling in the alley).
- All crosswalks are painted annually. Only those long lines on arterials that were in need of refreshing were repainted due to equipment and funding issues
- Tree trimming was reduced last year due to two forestry bucket trucks out of service since last March (aging equipment and awaiting the sale of bonds to purchase replacements).
Below is street data from the last three years:

**Street 3 Year Performance Report**
1/1/2018 to 12/31/2020

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>3 yr avg</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Requests Received</td>
<td>2,339</td>
<td>5,011</td>
<td>2,600</td>
<td>3,317</td>
<td>9,950</td>
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<tr>
<td>Pothole Work orders Completed</td>
<td>2,711</td>
<td>2,449</td>
<td>2,223</td>
<td>2,461</td>
<td>7,383</td>
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<tr>
<td>Number of Potholes Filled</td>
<td>3,913</td>
<td>55,637</td>
<td>41,152</td>
<td>33,567</td>
<td>100,702</td>
</tr>
<tr>
<td>Street Sweeping Lane Miles</td>
<td>3,501</td>
<td>5,254</td>
<td>5,268</td>
<td>4,674</td>
<td>14,023</td>
</tr>
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<td>41,152</td>
<td>33,567</td>
<td>100,702</td>
</tr>
<tr>
<td>Crack Sealing Linear Feet</td>
<td>N/a</td>
<td>N/a</td>
<td>48,000</td>
<td>16,000</td>
<td>48,000</td>
</tr>
<tr>
<td>Linear Feet of Agg Alley Maintained</td>
<td>262</td>
<td>252</td>
<td>291</td>
<td>268</td>
<td>805</td>
</tr>
<tr>
<td>Linear Feet of Agg Alley Maintained</td>
<td>124,265</td>
<td>140,385</td>
<td>163,230</td>
<td>142,627</td>
<td>427,880</td>
</tr>
<tr>
<td>Full Depth Work Orders Completed</td>
<td>36</td>
<td>15</td>
<td>25</td>
<td>25</td>
<td>76</td>
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<tr>
<td>Full Depth Work Orders Completed</td>
<td>58</td>
<td>71</td>
<td>85</td>
<td>71</td>
<td>214</td>
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Water main breaks – Compare from 2010-2020 – I realize we have a huge task ahead of us....but are we making any progress? Does it appear that our choices of which segments and full lines to replace have been the best ones?

Per Braxton Copley:

The variation in the number of breaks per year is largely a factor of climatic conditions. During years with drought conditions, we experience a higher rate of breaks such as 2012 and 2018. In years with above average precipitation, we see a decline in breaks such as 2019.

There are approximately 60 miles of water line beyond its useful life, and another approximately 200 miles of unwrapped ductile iron water line. With a replacement schedule of 6.5 miles per year, we have a significant backlog of line to replace before we will start to see a material decrease in break history.

The policy of replacing aged infrastructure as part of major street rehabilitation projects is a sound one. In the last couple of years, Utilities and Public Works have made improvements to the project selection process to take into consideration of utility infrastructure instead of purely pavement rating.
Success of the plan to do understreet utilities and all subsurface replacement on all major street projects (instead of just full-depth patching and resurfacing) – The idea here, again back in 2010, was that it would be cost-effective to do utility upgrades at the same time as street projects were done, and also that we would prevent having (what had become almost inevitable) water main breaks occur within 6 months or so under newly redone streets. Does the staff feel that this overall approach has been effective and cost-effective? Please explain. Does the data prove out regarding water main breaks?

Per Sylvia Davis:

Stormwater inlets cleaning has historically been an initiative performed by the Water Pollution Control Division. However inlets are also cleaned during the street sweeping process. The numbers the stormwater utility tracks do not include any inlets that may be cleaned along the street sweeping routes.

The WPC Division has a history of hitting their maintenance goal of hitting 11,000 inlets cleaned annually, with numbers hitting a high in 2017 when more than 26,000 inlets were cleaned and inspected. In 2018, work load and staffing issues lead to significant drop in storm water inlet cleaning and our Collections section took measures to restructure their approach and their sewer cleaning machine fleet.

During this time much of the inlet cleaning was focused around problem areas where heavy leaf drop and accumulation in inlets are known to cause slow draining in rain events. In late 2019 Collections took receipt of a new machine with a dedicated purpose of storm water maintenance. 2020 saw a large decrease in inlet cleaning due to staffing and scheduling impacts related to Covid-19, however quarterly performance measures have been set for 2021. WPC sees no reason why new, increased metrics will not be met this year.
Cost estimates vs. actual – How have we been doing, overall, lately, with project cost estimates vs. actual?

We have been doing fine. Project estimates that are in out-years typically need to be refined as costs continue to increase. It is possible that petroleum prices will increase significantly over the next several years which will have an impact on project estimates.

- **SW Topeka Blvd. m/o 45th to 49th:**
  - Initial planning level estimate was $360,000 for mill/overlay
  - Final estimate increased to $483,000 to account for full-depth patching
  - Low bid was $355,000.
- **SE 37th St. m/o Indiana Ave. to California Ave.:**
  - Estimate was $131,000
  - Low bid was $140,000
- **Central Park SORT:**
  - Project budget in the CIP (infrastructure only) was $1.8M
  - Engineer’s estimate was $1.5M
  - Low bid was $1.4M
- **SW Gage from 37th to SW 45th Street:**
  - Project budget in the CIP was $2.5M
  - Engineer’s estimate was $2.49M
  - Low bid was $1.7M (high bid was $2.2M)

**SW 25th, Urish to Kingsrow – PW staff has agreed it’s terrible, even suggested they might be able to work it in to 2021 – on any list?**

This is on a master list on the sales tax projects. Not occurring in 2021, however we will likely be recommending this to the Public Infrastructure Committee as a 2022 project.

**Washburn, 21st - 15th – getting to where it may be undriveable at some point – on any list?**

Washburn is not on our list for repairs. Staff drove this on Feb 4, and while there are several patches and a few isolated potholes, we feel this stretch is in decent condition.

**Shunga Mitigation – Valley Park NIA just won SORT with their highest priority being flood mitigation – is there an expectation that this project will occur AND their SORT money will be added? Or, could this project BE their SORT project?**

Utilities is managing the Shunga Mitigation project and that project has funding. It is estimated that any flood mitigation project will far exceed SORT funding levels. SORT
funding will be used in the typical manner for street, sidewalk and other similar infrastructure projects within the neighborhood.

Polk-Quincy – Where is the money that was budgeted from 2020? I know things are progressing and some grant applications are in. We knew we needed to pledge this money, but were hoping we could get away with spending little or none of it. Where are we on updated expectations?? Correspondingly, we needed to start framing up what capital projects WE were going to have to do in relation to this project. Has that happened yet? Reasons? A) We need the list..so we are prepared and can begin planning. B) There might be some negotiating room with KDOT that some of the things we are going to need to do could count as part of our match.

Money was budgeted starting in 2021. At this time we are developing a list of improvements that are likely needed however the Polk Quincy plans have not been finalized at this time. We are working to get as much as possible incorporated into the Polk-Quincy design, then will scope additional items/projects/considerations.

Traffic Signals, costs reduced from recent years – These had been $640,000 per year for 4 lights every year for a long time. Recently, the annual costs went up...which was scary. This year, they seem to be customized and some have gone back down a bit. Curious as to what is behind the change...how many per year are in those estimates....are we still on schedule (as we have been to date, as far as I know) for full and regular rotation?

We have been budgeting $885,000 per year which will get roughly 3 signals per year. Typical intersection is between $250k and $300k. These improvements also include updates for pedestrian access. The 2022 CIP shows over $1.2M in the budget for 2022 while 2023 and 2024 show significantly less that the $885,000. This was done in attempt to meet GO cap limits (we needed to reduce spending in 2023 and 2024 but we had cap space in 2022). As far as rotation – 186 signals/3yr equates to a 62 year replacement cycle. Preferred is 40 yrs. Staff is looking at our entire signal network and looking to eliminate signals where they are not warranted. In addition, our Traffic Engineer is looking into recent signal pricing trends and shooting to be able to report on it at the next Infrastructure Committee meeting (Feb 15).
Traffic Signal and Streetlight LED’s – Do we have documentation as to whether the changeout in bulbs is saving us money? (Hmm…was that in the recent Sustainability report, and I’ve already forgotten?) I know on the Washburn-Lane Parkway, aside from presumably the electric bill going way down, the maintenance has dropped almost to $0. We used to have bulbs going out almost daily….so maintenance staff was out here all the time. These new ones were claimed to be 10 year bulbs that might last 15….and so far, in now about 6 years, I don’t think a single one has burnt out. Huge savings on maintenance….. Related to that, then, have we renegotiated our streetlight rates with Evergy, now that they have fully converted?

We are not aware of any renegotiation of our streetlight rates. We have also been converting traffic signals to LEDs, however the ongoing pandemic has impacted our scheduled upgrades. The table below shows the electricity expense for streets lights since 2015. There was roughly a 5% drop ($100,000) in 2018 from 2017.

<table>
<thead>
<tr>
<th>Year</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$1,779,695</td>
</tr>
<tr>
<td>2016</td>
<td>$1,936,292</td>
</tr>
<tr>
<td>2017</td>
<td>$1,921,370</td>
</tr>
<tr>
<td>2018</td>
<td>$1,827,262</td>
</tr>
<tr>
<td>2019</td>
<td>$1,854,853</td>
</tr>
<tr>
<td>2020</td>
<td>$1,823,793</td>
</tr>
</tbody>
</table>

Downtown Streets - $100,000 per year  Found page 117, which says $100,000 per year....but the master spreadsheet says 0, 0, 0, 0, 0 with a future funding amount of $14,800,000. Which is it? Are there 2 listings??

There are two listings because of two separate funding sources. General Obligation Bond funding is not planned in the next 5 years (the zeroes), but there is $100,000 in maintenance using the Fix Our Streets sales tax.

NW Tyler – is in the big spreadsheet on p. 2 four (4) times. In each line, the project has increases....totalling roughly $800,000. What are the cost increases for? We are taking a LOT of Fix Our Streets money for this, but also an increasing amount of GO Bond and Utility money. I was engaged a little early on and more recently when staff was working to finalize plans. I know they have backed up more than once to get this project shaped up to doing the fundamentals and doing them well. Now yet another major cost increase? Is some of this money the sidewalk proposal that has gone to KDOT where, if I recall the discussion right, if we get the grant will do a bigger sidewalk project than if we don’t?

Field check plans in early fall of 2020 showed storm sewer piping for this project was larger and deeper than originally anticipated. In addition, in an attempt to avoid a relatively new water line, the road alignment was shifted but additional right of way, up to front porches was needed and sidewalk would have been just inside the ROW. Staff felt this was not appropriate so the alignment was shifted back requiring replacement of water line. Plans currently call for 5’ sidewalk on both sides of Tyler. We requested a grant for 10’ shared use path on east side. Receiving the grant would not increase project costs. This said, the estimate is still higher than we would normally anticipate. We are still looking into this. With the significant changes since field check plans, we are looking to the Office Check plans and estimates to better define actual costs.
NW Lyman Road and Sidewalks – Whew...this is a project that has needed attention for years. This is a good example of what we talked about this morning....where we need staff to redirect what sometimes can start as idle conversation or a simple request or staff feeling obligated to target into a certain area because of program guidelines into true top priorities..so that the money is there for those. I am impressed and glad that staff feels they can tackle this one.

Answer to follow under separate cover

Urish Road – Someone from staff mentioned this recently. Is there some conversation about whether we really need to do it? And when?

Urish Road between 21st and 29th needs to be reconstructed soon. Operations is having a challenging time maintaining this stretch of Urish – pavement has failed and we are patching patches (PCIs are in the mid-30s). Road is a narrow 2 lane section with open ditches, no shoulders and no sidewalks.

Curb and Gutter – How much of this line item are we actually spending on curb and gutter? What is the status on spending prior year allocations, at this point? What does our waiting list look like? Aside from citizen-reported issues, is there a corresponding staff-generated list? Staff was having a little trouble synching up plans to roll these out in the fashion they had planned, grouping all needs in certain blocks or neighborhoods into single contracts for efficiency sake (Potwin last year, maybe the last couple of years, being my example). Is that going better?

Staff uses service requests to identify where there are large concentrations of bad curbs. Curb projects have begun to focus on these areas (hot spots). We are also beginning to use curb funding to cover curb work associated with other projects. For example: In previous years if we did a mill/overlay, we would also replace failed curb but not necessarily charge to the curb fund (we would charge to the street rehab fund). While this is acceptable, it can reduce the amount of ‘street rehab’ we can do. We have also contracted with the firm that did the 2019 PCI determinations to evaluate curbs across the city. This is still in process as it was an addition to the original scope.

Staff is working on summarizing the totals spent from past allocations. When these numbers are available, they will be provided. Staff is also reviewing the open service requests to determine the current backlog.

Future Utilities – Are we expecting we will have enough in the fund to do the listed Water, Wastewater and Stormwater projects listed on p. 20?

The assumption that we used in creating the CIP was ongoing rate increases equal to the current increases in rates each year for water, storm and wastewater. These rates come directly out of the rate study that was the basis for the last round of rate increases. If we have rate increases equal to those currently in place, we will have the funding to do the programs.
As background, the rate model showed water and stormwater needing 9% per year to fund replacement and rehabilitation (at an improved level) and operations and wastewater at 2%. The governing body ultimately adopted the rate ordinance for water and storm water at 7.5% and wastewater at 2%. These increases have allowed us to move forward with improved replacement cycles for distribution and collection programs and major plant rehabilitation projects like those in the proposed CIP. The current rate increases are effective 2021, 2022 and 2023.

**TPD Real-Time Information Center** – Is the idea here that this is aspirational….and when it says “cash” is the idea that we might get grants?

The funding, if the project is approved, would come from operational budgets or possibly grants.